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Report Part Author(s): Joel Wuthnow

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Chinese Expeditionary Operations: Is There a Role for Joint Logistics?

Joel Wuthnow

Introduction

China's People's Liberation Army (PLA) has improved its ability to conduct joint operations within China and the region, but it lacks a similar ability for overseas operations.¹ One area where the disparities are stark is logistics, which encompasses both transportation and the sustainment of troops. Domestically, decades of reforms have led to a mature logistics structure attuned to supporting joint combat operations. Overseas logistical support, by contrast, remains a makeshift affair based on the individual services. This approach can support limited operations such as peacekeeping and counterpiracy, but the approach falls short of the demand to extend China's overseas combat power.

Most relevant discussions of China's future overseas logistics approaches focus on the country's issues with basing and access as well as civil-military integration. The Department of Defense addresses overseas logistics in its 2020 annual report on China's military power, for example, which includes an extensive discussion on potential facilities.² But this assessment does not consider joint logistics. Likewise, recent academic research by the China Maritime Studies Institute at the US Navy War College considers China's current base in Djibouti and its potential base in Pakistan.³ But both analyses center on the Chinese navy. For its part, Beijing has emphasized the need for additional support facilities based on agreements with friendly countries and support from Chinese state-owned enterprises.⁴ But even this discussion tends to assume the People's Liberation Army's services will continue to handle logistics. Though sensible from the perspective of current requirements, this arrangement nevertheless contrasts with China's move toward a joint command structure and the country's integration of logistics forces at home. The status quo also diverges from logistical practice

1. Mark R. Cozad, "Toward a More Joint, Combat Ready PLA?," in *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*, ed. Phillip C. Saunders et al. (Washington, DC: National Defense University [NDU] Press, 2019), 203–26.

2. Office of the Secretary of Defense (OSD), *Military and Security Developments Involving the People's Republic of China 2020* (Washington, DC: OSD, 2020), 128–30.

3. Peter A. Dutton, Isaac B. Kardon, and Conor M. Kennedy, *Djibouti: China's First Overseas Strategic Strongpoint*, China Maritime Report no. 6 (Newport, RI: China Maritime Studies Institute [CMSI], 2020); and Isaac B. Kardon, Conor M. Kennedy, and Peter A. Dutton, *Gwadar: China's Potential Strategic Strongpoint in Pakistan*, China Maritime Report no. 7 (Newport, RI: CMSI, 2020).

4. Xiao Tianliang, 肖天亮, 战略学 [Science of military strategy] (Beijing: National Defense University Press, 2015), 303–4.

in the United States. American doctrine considers logistics a key Joint Force function that provides commanders “the means to enable freedom of action and endurance and to extend operational reach.”⁵ If the People’s Liberation Army intends to conduct joint operations beyond the first island chain, it will eventually have to shift its approach away from the services and potentially toward the Joint Logistic Support Force (JLSF).

What role might the Joint Logistic Support Force play in overseas operations? Established in late 2016 as part of the Xi Jinping-era reforms, the Joint Logistic Support Force is the primary agent for joint logistics for domestic and regional contingencies.⁶ Chinese sources adopt an expansive definition of “joint logistics,” covering both common-use materials, such as food, clothing, and some types of ammunition, and common-use services, such as medical services, transportation, and construction.⁷ The Joint Logistic Support Force consolidates many of these functions, though service-specific supplies and some nominally joint functions, such as transportation, continue to be managed by the services.⁸ Despite a growing role at home, the Joint Logistic Support Force has no significant overseas responsibilities at present. But by 2030, the force could take the lead in delivering and sustaining troops. Unlike the services, the Joint Logistic Support Force is an independent force (部队), a status that justifies both a force-building and an operational portfolio. The force has also amassed experience through transregional exercises and other training, which it could draw on in a global context.

How the Joint Logistic Support Force evolves will depend on how the strategic environment and China’s military strategy develop over the next decade. This chapter starts by reviewing the current bifurcation in PLA logistics between a joint structure at home and a service-led approach abroad. The chapter then uses two scenarios—a regionally focused People’s Liberation Army and a global, expeditionary People’s Liberation Army—to assess the overseas roles the Joint Logistic Support Force could play by 2030. In the first scenario, the force would continue to play only a marginal role abroad. In the second, the People’s Liberation Army would shift to a model more like the US military, with the Joint Logistic Support Force appointed as lead coordinator for strategic transportation. In the latter case, force would have a larger overseas footprint. The next section discusses obstacles the Joint Logistic Support Force will face if it assumes these roles, including bureaucratic resistance, the need for new organizations, human capital shortcomings, and operational risks. The conclusion addresses implications for the United States and identifies indicators for measuring PLA progress.

Logistics of the People’s Liberation Army in the Early 2020s

Assessing how China’s logistics system could evolve to support future expeditionary operations requires an understanding of the current organization of the system. Logistical developments at

5. Joint Chiefs of Staff, *Joint Logistics*, Joint Publication 4-0 (Washington, DC: Joint Chiefs of Staff, February 4, 2019), ix.

6. Joel Wuthnow and Phillip C. Saunders, *Chinese Military Reforms in the Age of Xi Jinping: Drivers, Challenges, and Implications*, China Strategic Perspectives no. 10 (Washington, DC: Institute for National Strategic Studies, NDU Press, 2017).

7. Susan M. Puska, “Taming the Hydra: Trends in China’s Military Logistics since 2000,” in *The PLA at Home and Abroad: Assessing the Operational Capabilities of China’s Military*, ed. Roy Kamphausen, David Lai, and Andrew Scobell (Carlisle, PA: Strategic Studies Institute, US Army War College Press, 2010), 562–67.

8. Joel Wuthnow, “A New Era for Chinese Military Logistics,” *Asian Security* 17, issue 3 (2021): 281–84.

home and abroad have followed different trajectories. Within China, the People's Liberation Army has built a comprehensive joint logistics structure to assist in domestic emergencies and provide wartime support to joint commanders.⁹ Farther afield, China relies on a patchwork of service-centric logistical capabilities and external support, assigning almost no role to the Joint Logistic Support Force. Thus, the trajectory of China's future overseas operations will depend on whether the country will merge these differing domestic and foreign practices, whether China will extend its joint logistics capability far beyond its borders, and how it would achieve such a shift.

A Stronger "Home Game"

The People's Liberation Army's joint logistics structure can be traced to both operational and financial concerns. Since 1993, Chinese military strategy has focused on "integrated joint operations" at home and in the region—a focus that has created new logistical requirements.¹⁰ Complex domestic missions such as humanitarian assistance and disaster relief have required multiple PLA services and branches to work together at a scale and tempo that justifies consolidated control over logistics operations.¹¹ More importantly, sustaining joint combat operations against regional adversaries such as Taiwan, Japan, Vietnam, India, and the United States would require a cohesive logistics apparatus that supported leaders in China's five theater commands as well as naval and air force operations out to the first island chain. In addition, financial rationale supports this consolidation: During and after the Cold War, the services maintained their own logistics departments, which led to severe duplication of effort.¹²

Given these motives, China's logistical reforms have focused on the centralization of authority and the integration of resources. Specifically, after the People's Liberation Army issued its inaugural joint campaign guidelines in 1999, the General Logistics Department established joint logistics departments in each military region to handle general purpose supplies, such as petroleum, oil, and lubricants; food supplies; and certain spare parts. Meanwhile, the services continued to operate their own supply chains for specialized items and maintained responsibility for China's airlift and sealift capabilities. (In 2004, the People's Liberation Army also established a pilot program in the Jinan military region to eliminate logistics departments within the services, but this program ultimately was not adopted elsewhere.) Both joint and service-based logistics forces were also integral to transregional training exercises that focused on how to move large numbers of troops across China and sustain them in distant field locations.¹³

A pivotal moment came with the creation of the Joint Logistic Support Force in 2016. The Joint Logistic Support Force is primarily responsible for "integrating strategic and campaign forces focusing

9. Wuthnow, "A New Era."

10. M. Taylor Fravel, *Active Defense: China's Military Strategy since 1949* (Princeton, NJ: Princeton University Press, 2019).

11. Susan M. Puska, "SARS 2002–2003: A Case Study in Crisis Management," in *Chinese National Security: Decisionmaking under Stress*, ed. Andrew Scobell and Larry Wortzel (Carlisle, PA: Strategic Studies Institute, US Army War College Press, 2005), 85–134.

12. Puska, "Taming the Hydra," 553–635; and LeighAnn Luce and Erin Richter, "Handling Logistics in a Reformed PLA: The Long March toward Joint Logistics," in *Chairman Xi Remakes*, 257–92.

13. Dennis J. Blasko, "The Biggest Loser in Chinese Military Reforms: The PLA Army," in *Chairman Xi Remakes*, 367–70.

on general purpose support tasks” and providing logistical support to the theaters.¹⁴ Organized on a hub-and-spoke model, the Joint Logistic Support Force draws from units previously subordinate to the General Logistics Department (figure 8-1 depicts the JLSF’s organizational structure) and the military regions.¹⁵ A central base in Wuhan directs five Joint Logistic Support Centers, each aligned with a theater. Figure 8-2 depicts the internal structure of the Joint Logistics Support Center.¹⁶ The centers, in turn, oversee supply depots and mobile units for transporting heavy equipment and carrying out task-oriented functions, such as medical support and resupply.¹⁷ The key advance was centralization: The JLSF commander can direct movements between theaters, which could prove to be essential in a major contingency. Nevertheless, the Joint Logistic Support Force must coordinate with logistics departments under each theater’s service component command as well as civilian, state-owned enterprises. The force must also leverage transportation assets owned by the services, such as Ilyushin Il-76s and Xi’an Y-20s belonging to the PLA Air Force (PLAAF).¹⁸

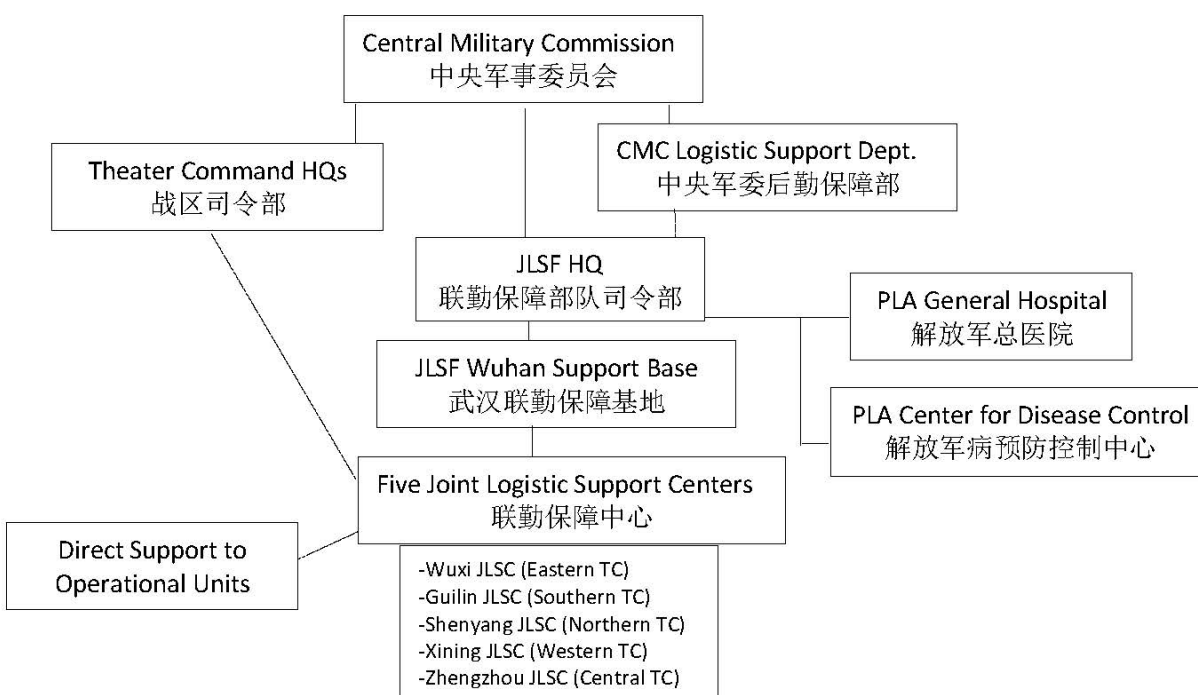


Figure 8-1. Organization chart of the Joint Logistic Support Force

Since 2016, the Joint Logistic Support Force has participated in several joint exercises that focused on supporting cross-theater operations.¹⁹ In January 2020, the Joint Logistic Support Force made its operational debut, leading the People’s Liberation Army’s response to the coronavirus

14. State Council Information Office of the People’s Republic of China (PRC), “China’s National Defense in the New Era” (white paper, State Council Information Office of the PRC, Beijing, China, July 2019).

15. Luce and Richter, “Handling Logistics.”

16. Luce and Richter, “Handling Logistics”; and Wuthnow, “A New Era.”

17. Kevin McCauley, *China’s Logistics Support to Expeditionary Operations* (testimony, *China’s Military Reforms and Modernization: Implications for the United States, Before the US-China Economic and Security Review Commission*, February 20, 2020), 26–27; and Luce and Richter, “Handling Logistics,” 276.

18. Wuthnow, “A New Era.”

19. OSD, *Military and Security Developments 2020*, 66–67.

disease 2019 (COVID-19) outbreak in Wuhan. In this instance, the Joint Logistic Support Force constructed a makeshift hospital, arranged transportation for 4,000 military medics, and handled the delivery of critical medical supplies.²⁰ Although not reflective of the scale and complexity of wartime demands, these operations highlighted several aspects of China's improving logistical capabilities, including the JLSF commander's ability to harness scarce resources from across the country and ensure their rapid delivery to the front lines; the use of information technology to process requests and monitor shipments; and increased civil-military cooperation, such as the role played by military representatives in civilian transportation agencies.²¹ In sum, the case demonstrated a maturing joint logistics system at home and likely provided lessons for further developments.

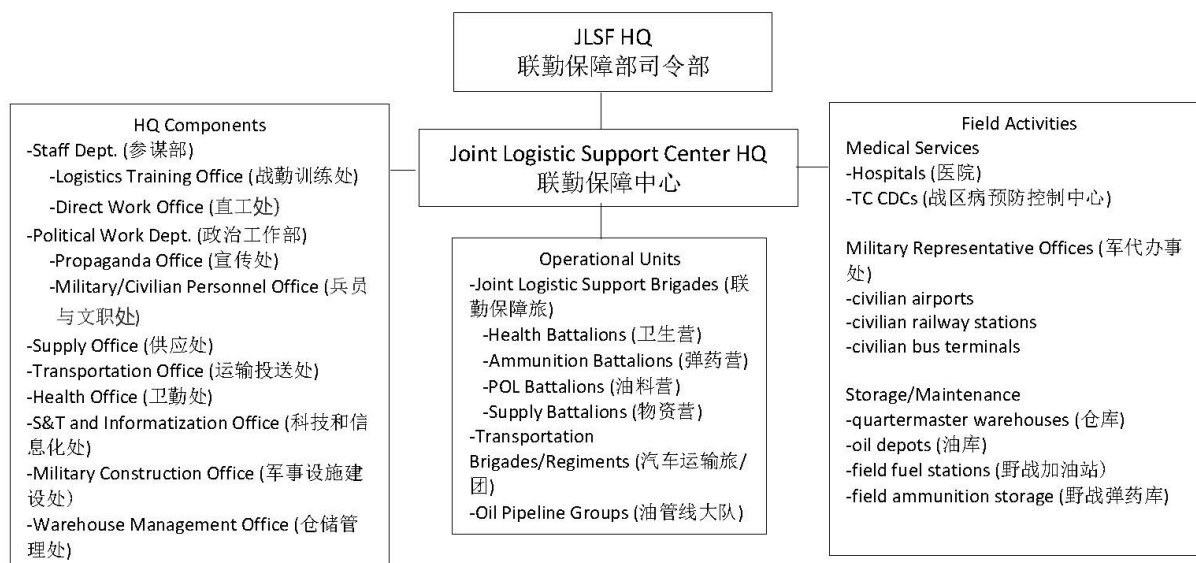


Figure 8-2. Organization chart of the Joint Logistic Support Centers

A Weaker “Away Game”

By contrast, China has not fully developed its logistical support capabilities beyond the first island chain. The current approach for supporting overseas operations consists of three models that are usually employed in combination.²² The first is a “bring it with you” model, such as Chinese peacekeeping forces who bring equipment and supplies, including organic support personnel, with them to Africa or the Middle East and naval counterpiracy task forces that incorporate replenishment ships and tankers.²³ The People's Liberation Army has improved this model, but the constraints—including the limited capacity of PLA cargo aircraft and replenishment ships—have required the organization to use other options to extend the range and duration of overseas missions. Modern

20. Joel Wuthnow, “Responding to the Epidemic in Wuhan: Insights into Chinese Military Logistics,” *China Brief* 20, no. 7 (April 2020): 6–11, <https://jamestown.org/program/responding-to-the-epidemic-in-wuhan-insights-into-chinese-military-logistics/>.

21. Wuthnow, “A New Era,” 7–9.

22. Joel Wuthnow, Phillip C. Saunders, and Ian Burns McCaslin, “PLA Joint Operations in the Far Seas” (working paper, 2019 CMSI Conference: Going Global?, Newport, Rhode Island, May 7, 2019).

23. Chad Peltier, *China's Logistics Capabilities for Expeditionary Operations* (Washington, DC: US-China Economic and Security Review Commission, 2020), 49.

water purification systems on naval ships are one example of an upgrade. Moreover, as of 2020, China had two Type 901 combat support ships, eight Type 903 replenishment ships, one Type 905 fleet oiler, 20 Il-76 airlifters, and at least eight Y-20 airlifters.²⁴

A second model that has several variations is reliance on external actors. The UN, for instance, provides central maintenance services and stockpiles for peacekeepers. Chinese forces could use external assets or procure them from the local economy once the forces have exhausted their organic resources.²⁵ Naval task forces routinely berth at foreign ports (some of which are built, owned, and operated by Chinese state-owned enterprises) for rest and resupply. The task forces also rely on services supplied by foreign and Chinese companies.²⁶ In a recent innovation, the People's Liberation Army has been using Chinese civilian ships owned by shipping firm China Ocean Shipping Company, Limited to conduct underway replenishment for naval vessels.²⁷ This approach is relatively flexible and inexpensive, but third-party procurement can only supply a limited amount of goods and services. Foreign civilian infrastructure may also be vulnerable to attack, and contracting disputes or corruption involving foreign partners may arise.

A third, incipient model is building a network of military bases and facilities overseas. China's first foreign base, located in Djibouti, hosts medical, supply, and maintenance personnel who can support forward-deployed PLA units and includes storage facilities for ammunition and other supplies.²⁸ The base, which supports the navy, is well situated to support Chinese peacekeepers.²⁹ In the future, China may open similar facilities in countries such as Pakistan and Cambodia. Moreover, the Office of the Secretary of Defense states China has "likely considered" building facilities in 12 countries in South and Southeast Asia, the Middle East, and Africa.³⁰ In comparison with civilian facilities, these bases would offer better protection from terrorism—though not from state adversaries due to the absence of stronger defenses. But China would incur the costs of managing overseas bases, and they would be subject to host-country politics.³¹

In contrast to the joint logistics system within China, the three overseas models focus on the individual services. (One exception is cooperation in transportation; for instance, UN peacekeepers are occasionally flown to their mission location on PLAAF transport aircraft.) Indeed, the Joint Logistic Support Force currently plays no international role other than dispatching medical personnel to UN peacekeeping missions and other small-scale deployments, such as competing in international

24. James Hackett, ed., *The Military Balance 2020* (London: International Institute for Strategic Studies, 2020), 262–65; and Andrew S. Erickson and Austin M. Strange, *No Substitute for Experience: Chinese Antipiracy Operations in the Gulf of Aden*, CMSI Red Book no. 10 (Newport, RI: CMSI, 2011), 122–3.

25. Don Leslie, *Operational Logistical Support of UN Peacekeeping Missions: Intermediate Logistics Course* (Williamsburg, VA: Peace Operations Training Institute, 2011), 50–73.

26. Isaac B. Kardon, "China's Overseas Base, Places, and Far Seas Logistics," in *The PLA beyond Borders: Chinese Military Operations in Regional and Global Context*, ed. Joel Wuthnow et al. (Washington, DC: NDU Press, 2021), 73–107.

27. Peltier, *China's Logistics Capabilities*, 7.

28. Dutton, Kardon, and Kennedy, *Djibouti*, 35–36; and Conor M. Kennedy, "Strategic Strong Points and Chinese Naval Strategy," *China Brief* 19, no. 6 (March 2019), <https://jamestown.org/program/strategic-strong-points-and-chinese-naval-strategy/>.

29. Dutton, Kardon, and Kennedy, *Djibouti*, 35–36; Kennedy, "Strategic Strong Points"; and Kardon, "China's Overseas Base."

30. Kardon, Kennedy, and Dutton, *Gwadar*; and OSD, *Military and Security Developments 2020*, 129.

31. Christopher D. Yung and Ross Rustici, "Not an Idea We Have to Shun": *Chinese Overseas Basing Requirements in the 21st Century*, China Strategic Perspectives no. 7 (Washington, DC: Institute for National Strategic Studies, NDU Press, 2014), 33–35.

military games in Russia. Personnel of the Joint Logistic Support Force also participated in a medical mission in Djibouti named “Operation Bright Eyes.”³² This bifurcation occurred because, thus far, China has not needed a joint logistics system abroad. Although Hu Jintao famously espoused “new historic missions” that would require the People’s Liberation Army to secure China’s overseas interests, most of these missions have been small and confined to a single service.³³ The People’s Liberation Army has also conducted overseas contingency operations, such as the evacuation of Chinese citizens from Libya in 2011 and Yemen in 2015. But in these cases, Chinese forces were able to improvise solutions without a joint logistics system. (In lesser contingencies, China might not need the People’s Liberation Army at all because the nation could rely on host-country forces and private security companies for support.)³⁴ Bureaucratic politics may also be at play; without a stronger operational rationale for consolidated control, the services can lobby to retain their logistical roles. This is most prominent with the PLA Navy [PLAN], which appears to direct counterpiracy operations, in addition to managing the logistical support facility in Djibouti. Chinese ground forces also manage their own logistics requirements for UN peacekeeping. Thus, an expanded role for the Joint Logistic Support Force would constitute an implicit concession on the part of the People’s Liberation Army’s services, which recent reforms basically removed from the operational business.

Contemplating an Expeditionary Joint Logistic Support Force

By 2030, larger and more complex missions could provide a rationale for joint logistical support of expeditionary operations. Though the Joint Logistic Support Force could evolve in different ways, this section highlights two broad trajectories that depend on how the security environment evolves.³⁵ In the first scenario, domestic and regional contingencies would continue to preoccupy the People’s Liberation Army. Overseas operations would focus on sea-lane protection and military operations other than war (MOOTW). The Joint Logistic Support Force would become an important supporting actor, though the services would retain the lead. In the second scenario, China would have achieved a more secure domestic environment and would have resolved some territorial disputes, allowing the military to conduct more ambitious overseas operations, including joint operations in complex, nontraditional, or combat situations, such as strikes and raids.³⁶ In this second scenario, the Joint Logistic Support Force could become an overarching coordinator for transportation and sustainment, in which case, it would likely deploy more logistics personnel.

32. Wang Weidong and Lin Duo, “Several Chinese Participating Teams to Make Their Debut in IAG 2021,” *PLA Daily* (website), August 9, 2021, http://english.pladaily.com.cn/2021special/2021-08/09/content_10078822.htm; and Peltier, *China’s Logistics Capabilities*, 10.

33. Daniel M. Hartnett, “The ‘New Historic Missions’: Reflections on Hu Jintao’s Military Legacy,” in *Assessing the People’s Liberation Army in the Hu Jintao Era*, ed. Roy Kamphausen, David Lai, and Travis Tanner (Carlisle, PA: Strategic Studies Institute, US Army War College Press, 2014), 36; and Phillip C. Saunders, “PLA Command and Control of Overseas Operations,” in *PLA beyond Borders*, 107–26.

34. Timothy R. Heath, *China’s Pursuit of Overseas Security* (Santa Monica, CA: RAND Corporation, 2018), 23–32.

35. Lonnie Henley, “Whither China? Alternative Military Futures, 2020–2030,” in *The People’s Liberation Army in 2025*, ed. Roy Kamphausen and David Lai (Carlisle, PA: Strategic Studies Institute, US Army War College Press, 2015), 49–50.

36. Wuthnow, Saunders, and McCaslin, “PLA Joint Operations.”

A Regionally Focused Joint Logistic Support Force

The first scenario represents only a modest change from the current situation. Overseas logistics would be handled primarily by the services and third parties, with a few more overseas logistics hubs being opened (under naval management) along key maritime routes. In support of these modest reforms, one group of PLA scholars argues Chinese civilian enterprises should play a key role in an evolving “overseas delivery support system.”³⁷ These civilian partnerships would represent a continuation of the second model of overseas logistical support previously discussed wherein the People’s Liberation Army relies upon external actors for logistical support. Other scholars suggest civilian enterprises should be tied more closely with China’s “strategic strongpoints,” blending civilian support with the third model previously discussed wherein the People’s Liberation Army develops a network of overseas facilities.³⁸ Nevertheless, in either case, the Joint Logistic Support Force would play various niche roles: overseeing the construction of civilian air-support and sea-support forces and directing their use in support of military operations; managing strategic delivery bases within China that serve as hubs for overseas operations; and deploying logisticians and equipment on a small scale. Concentrating on these roles would allow the Joint Logistic Support Force to focus its capabilities and training on domestic and regional contingencies while using extant and near-term capabilities.

Strategic Support Fleets

One role for the Joint Logistic Support Force in this scenario would be managing China’s civilian-support fleets. The 12th Five-Year Plan (2011–15) directed the construction of civilian maritime and aviation support fleets to fill PLA capability gaps and reduce the burden on the military budget.³⁹ These programs were addressed in the 2016 national defense transportation law, which mandated large and medium state-owned enterprises build capabilities and conduct training to support “long-distance and large-scale” defense transportation.⁴⁰ These civilian fleets function similarly to the US Civil Reserve Air Fleet: They are commercial assets the People’s Liberation Army can mobilize for national defense purposes. Several vessel types were integrated into the maritime civilian strategic support fleets, including roll-on, roll-off ships; oil tankers; and even a 50,000-ton

37. Luo Lei et al., “海军远海运输投送能力建设研究” [Research on the construction of naval ocean transportation projection capability], *军事交通学院学报* [*Journal of Military Transportation University*] 22, no. 2 (2020): 7.

38. Lu Xinyuan 吕新远, Qiao Wei 乔伟, and Guo Qiusheng 郭秋生, “新时期陆军运输投送交通保障问题研究” [Research on army delivery projection and transportation support in the new era], *军事交通学院学报* [*Journal of the Military Transportation University*] 20, no. 12 (2018): 14.

39. Conor M. Kennedy, *Civil Transport in PLA Power Projection* (Newport, RI: CMSI, 2019), 7; and Chen Xiangpeng et al., “加强我国战略投送支援机队建设的思考” [Considerations on strengthening construction of the strategic-delivery support fleet in the new era], *军事交通学院学报* [*Journal of Military Transportation University*] 21, no. 10 (2019): 11.

40. 中华人民共和国国防交通法 [Law of the People’s Republic of China on national defense transportation], Order No. 50 of the President (2016).

semisubmersible transport ship with cargo space equivalent to two football fields.⁴¹ The air fleets include cargo planes and helicopters used for medical rescue.⁴²

Although these assets belong to state-owned enterprises, the Joint Logistic Support Force ensures their construction follows military requirements. The force also organizes training and appears to play an oversight role in the integration of these platforms into military operations. According to one group of PLA academics commenting on command of the civilian air-support fleet, “In peacetime, the regional joint logistics support center and the theater transportation and delivery management department (relevant transportation military representative office) should guide the aircraft fleet, carry out national defense education, military knowledge and laws and regulations, and do a good job in the organization and construction of the fleet.”⁴³ The Guilin Joint Logistic Support Center, which is aligned with the Southern Theater Command, has directed civilian cargo ships to transport fresh water, oil, and food to outposts in the South China Sea and has used a civilian oil tanker to replenish naval vessels.⁴⁴ The center also organized an exercise involving civilian cargo aircraft at Shanghai Pudong International Airport.⁴⁵ Similarly, the Wuxi Joint Logistic Support Center, which is aligned with the Eastern Theater Command, has overseen the construction of semisubmersible ships, and one of the center’s transport detachments or *dadui* (船运大队) has conducted training in damage control, maritime rescue, and oil delivery.⁴⁶

At present, these capabilities are used primarily for operations within the first island chain, including the South China Sea, East China Sea, and Yellow Sea. This usage of the capabilities reflects both the Joint Logistic Support Force’s focus on regional contingencies and its organizational structure, wherein each Joint Logistic Support Center is affiliated with a particular theater. But as the civilian-support fleets expand, their assets could be used to support overseas operations. Addressing an expansion of the maritime support fleet, one JLSF author notes the gap between the PLA Navy’s “long-distance ocean projecting capabilities” and its production targets, providing a rationale for using civilian ships in distant theaters.⁴⁷ Another JLSF author writes civilian aviation

41. Xiong Gang 熊刚, Gao Jie 高洁, and Guo Bin 郭彬, “揭秘新成立的中央军委联勤保障部队” [Demystifying the newly established Central Military Commission Joint Logistic Support Force], 中国青年报 [China Youth Daily] (website), January 19, 2017, http://zqb.cyol.com/html/2017-01/19/nw.D110000zgqnb_20170119_2-11.htm; and PLA Daily, “我军战损舰船有了海上应急抢修平台” [Our battle-damaged ships have a marine emergency repair platform], Maritime Service Network, April 17, 2017, <https://www.cnss.com.cn/html/currentevents/20170417/267879.html>.

42. China Military Television Network, 无锡联勤保障中心: 军民联合打造陆海空联勤保障新网 [Wuxi Joint Logistic Support Center: Military and civilians jointly build a new land, sea, and air joint logistics support network] (Beijing: China Military Television Network, 2016), JS7TV video, http://www.js7tv.cn/video/201612_74406.html; and OSD, *Military and Security Developments 2020*, 66–67.

43. Hai Jun et al., “航空战略投送支援机队的实战化运用” [Practical application of the Aviation Strategic Projection Support Fleet], 国防交通工程与技术 [National Defense Transportation, Engineering, and Technology] 17, no. 6 (2019): 1.

44. Lei Xiang 雷响 and Lin Duo 林铎, “桂林联勤保障中心完善民用运力动员机制” [Guilin Joint Logistics Support Center perfects civilian capacity mobilization system], PLA Daily, July 3, 2018, 2; and PLA Daily, “桂林联勤保障中心贯彻军民融合发展战略” [Guilin Joint Logistic Support Center implements military-civilian integration development strategy], The People’s Network, January 20, 2018, <http://military.people.com.cn/n1/2018/0120/c1011-29776427.html>.

45. Xinhuanet, “桂林联保中心与民航部门联合组织投送演练” [Guilin Joint Logistic Support Center and the Civil Aviation Department jointly organized a delivery drill], Sina (website), January 5, 2018, <http://mil.news.sina.com.cn/2018-01-05/doc-ifyqinzs8844825.shtml>.

46. PLA Daily, “Our battle-damaged ships”; Kennedy, *Civil Transport*, 17; and China Military Television Network, 无锡联勤保障中心某船运大队组织海上实战化演练 [A Wuxi Joint Logistic Support Center shipping detachment organizes maritime real combat exercise] (Beijing: China Military Television Network, 2020), JS7TV video, http://www.js7tv.cn/video/202003_210386.html.

47. Luo Lei et al., “Research on the construction,” 6.

fleets would be increasingly instrumental for overseas operations because of PLA aircraft shortages and restrictions on permits for military aircraft. (The authors claim civilian aircraft face fewer encumbrances due to provisions of the Chicago Convention on International Civil Aviation.)⁴⁸ Other PLA scholars lobby for expanding the air support fleet to enable peacekeeping, military assistance, and humanitarian assistance.⁴⁹

Strategic Delivery Bases

A related role for the Joint Logistic Support Force concerns the management of strategic delivery bases within China. In Chinese terminology, “strategic delivery” refers to the projection of forces across long distances, whether within China or abroad.⁵⁰ One group of PLA logisticians defines the concept as actions that “integrate all sorts of transportation means to project forces to war zones or areas at risk,” making these actions critical to seizing the “battlefield initiative.”⁵¹ Strategic delivery bases seek to merge civilian and military resources; their distinctive attributes include extensive storage facilities, cargo terminals, loading and unloading equipment, and specialized crews that are able to handle large volumes of cargo.⁵² In 2014, the first base, formally called a “military-civilian fusion strategic projection base,” was established adjacent to the Zhengzhou Xingzheng International Airport.⁵³ Located at the crossroads of multiple domestic air, rail, and highway routes, the new base serves as a storage and transportation hub.⁵⁴ The base’s primary mission is likely to provide rear-area support for the theaters, but it has played a small overseas role by managing the dispatch of some Chinese peacekeepers.⁵⁵

In the scenario in which JLSF expansion is limited, the People’s Liberation Army could use strategic delivery facilities more regularly to support overseas operations. The Joint Logistic Support Force would manage base construction and operations; these activities would include tracking inventories of key supplies, requesting resources from other JLSF sites, procuring resources from civilian firms when supplies have been depleted, handling storage and maintenance, and facilitating the overseas transportation of personnel and materiel by civilian-support fleets (although the services would continue to direct overseas operations using military assets). Even so, the Joint Logistic Support Force could promote more efficient long-term deployments by managing key parts of the supply chain and arranging transportation (for example, by centralizing support functions for peacekeepers) and offer tailored options in the event of contingency operations, such as **noncombatant evacuation operations (NEOs)**.

48. Chen Xiangpeng et al., “Considerations on strengthening construction,” 12.

49. Hai Jun et al., “Practical application,” 2.

50. All-Military Terminology Management Committee 全军军事术语管理委员会, 中国人民解放军军语 [China’s People’s Liberation Army military terminology] (Beijing: Military Science Press, 2011), 58.

51. Zhao Guang 赵光, Qian Xiaoqing 钱晓庆, and Dai Weiwei 戴卫伟, “美军敏捷运输对我军战略投送建设的启示” [US Army agile transportation and its enlightenment to development of our army’s strategic projection capability], 军事交通学院学报 [Journal of Military Transportation University] 21, no. 3 (2019): 6.

52. Chung Chieh and Andrew N. D. Yang, “Crossing the Strait: Recent Trends in PLA ‘Strategic Delivery’ Capabilities,” in *PLA beyond Borders*, 49–71.

53. Kennedy, *Civil Transport*, 28.

54. Kennedy, *Civil Transport*, 28.

55. Hua Xiao 花晓 and Zhao Jie 赵杰, “全国首个军民融合式应急投送保障基地高效运行” [Efficient operation of the country’s first military-civilian integrated emergency delivery support base], *PLA Daily*, October 14, 2016, 7.

Niche Deployers

Finally, within the first (regionally focused) scenario, the Joint Logistic Support Force of 2030 would be based mainly within China, and the services would continue to handle overseas resupply, engineering, maintenance, repair, and contracting services. Playing a supporting role, the Joint Logistic Support Force could dispatch logisticians and other personnel. The force's most obvious role would be in military medicine. Under the 2016 reforms, many of the People's Liberation Army's hospitals and centers for disease control that had previously been under the General Logistics Department as well as military regions were consolidated under the Joint Logistic Support Force. Personnel from these units would deploy to UN peacekeeping missions, as they do today, and take part in epidemic control, as they did during the Ebola outbreak of 2014–16.⁵⁶ These personnel could also support multinational exercises and operations; indeed, one of the few overseas exercises involving JLSF personnel was a 2019 event with Germany that focused on a health crisis at a fictional refugee camp.⁵⁷

Other specialized logistics personnel might also be deployed in small numbers. In the event of a pipeline malfunction or terrorist incident, for instance, JLSF pipeline specialists could be quickly dispatched with heavy equipment to repair damaged pipelines, drawing on experience gained in domestic training exercises.⁵⁸ The Joint Logistic Support Force might also call upon transportation experts in some cases, such as when they need inspection teams to assess the condition of highways or railways. In 2019, for instance, JLSF technicians helped to ensure PLA troops could transit into Russia despite rail-gauge differences between the two countries.⁵⁹ But limitations on the Joint Logistic Support Force's capacity to operate abroad would mean support for large-scale humanitarian assistance and disaster relief operations or NEOs would fall to the services, foreign partners, or civilian contractors.

A Global, Expeditionary Joint Logistic Support Force

A different scenario imagines the People's Liberation Army maintaining a larger overseas presence. In this scenario, the People's Liberation Army would make additional contributions to UN peacekeeping missions, expand patrols of critical sea lanes, and maintain a forward capability that could be used to strike and raid state and nonstate actors in response to threats against Chinese interests.⁶⁰ Some operations would involve single services, but joint task forces would be established

56. Joel Wuthnow, "PLA Operational Lessons from UN Peacekeeping," in *PLA beyond Borders*, 231–58; and Mehga Rajagopalan, "China to Send Elite Army Unit to Help Fight Ebola in Liberia," Reuters (website), October 31, 2014, <https://www.reuters.com/article/us-health-ebola-china/china-to-send-elite-army-unit-to-help-fight-ebola-in-liberia-idUSKBN0IK0N020141031>.

57. Peltier, *China's Logistics Capabilities*, 11.

58. Wang Junbo 王均波, Guo Chen 郭晨, and Yang Zhengwen 杨正文, "仗打到哪里, 管线就铺设到哪里" [Pipelines will be constructed wherever the battle is fought], China Military Online, September 29, 2019, http://www.81.cn/lqbz/2019-09/29/content_9639683.htm.

59. Chen Zhuo, "Chinese Train Echelon Departs for IAG 2019," China Military Online (website), July 18, 2019, http://eng.chinamil.com.cn/view/2019-07/18/content_9562097.htm.

60. Oriana Mastro, "A Global Expeditionary People's Liberation Army, 2025–2030," in *People's Liberation Army in 2025*, 207–34.

in more complex situations.⁶¹ Overseas basing would expand to include up to a dozen facilities with prepositioned supplies, port and airport facilities, support and combat troops, etcetera. In this scenario, the Joint Logistic Support Force would emerge as a lead coordinator for strategic delivery. In support of expeditionary operations, the force would station personnel overseas and dispatch units with sizes equal to or larger than that of a battalion.

Lead Coordinator

As in the first scenario, the Joint Logistic Support Force would oversee strategic delivery bases within China and manage civilian-support fleets. But these roles would be subsumed within larger transportation and sustainment responsibilities. In effect, the Joint Logistic Support Force would become a functional combatant command. These responsibilities would not imply the establishment of geographic combatant commands, as in the US system; the Joint Logistic Support Force could support combat troops operating under joint task forces or under direct leadership from the Joint Staff Department of the Central Military Commission (CMC).⁶² Such an innovation has been discussed in some PLA circles. According to scholars from the Academy of Military Science, a current PLA weakness is the lack of an equivalent to United States Transportation Command. These scholars recommend establishing a similar entity to “perform diversified tasks overseas, strengthen the construction of overseas strategic delivery capabilities, and become an overseas strategic delivery force commensurate with China’s status and compatible with the military’s tasks.”⁶³ Likewise, other PLA experts call for a “centralized and unified transportation and delivery command [that] strengthens communication and coordination between relevant departments at home and abroad.”⁶⁴

In the transportation arena, a new division of labor would give the Joint Logistic Support Force a stronger operational role. The services would build and train strategic delivery assets, but taskings would come from JLSF headquarters, with approval from the Joint Staff Department (which has de facto seniority to the services and JLSF headquarters because the Joint Staff Department director sits on the Central Military Commission). In addition, the Joint Staff Department would manage overseas operations, as it has done since 2016.⁶⁵ According to one inferential argument, the Joint Logistic Support Force may already take operational guidance from the Joint Staff Department (rather than the Central Military Commission’s Logistic Support Department).⁶⁶ Such an arrangement would be consistent with the aim of the reforms, which is to distinguish between those responsible for operations—a role the Joint Logistic Support Force possesses as an independent force—and the services, which are responsible for force building. But as an independent force, the Joint Logistic

61. Phillip C. Saunders, *Beyond Borders: PLA Command and Control of Overseas Operations*, Strategic Forum no. 306 (Washington, DC: Institute for National Strategic Studies, NDU Press, 2020).

62. Saunders, *Beyond Borders*.

63. Dong Zhigao 董智高 and Zhou Lei 周磊, “关于海外军事后勤保障力量建设的认识与思考” [Understanding and thinking on the construction of overseas military logistics support forces], 国防科技 [National Defense Science & Technology] 37, no. 2 (2016): 86.

64. Wang Tianze 王天泽, Qi Wenze 齐文哲, and Hai Jun 海军, “海外军事基地运输投送保障探讨” [Discussion on transportation and support of overseas military bases], 国防交通工程与技术 [National Defense Transportation, Engineering, and Technology] 16, no. 1 (2018): 33.

65. Yao Jianing, ed., “PLA Sets Up Overseas Operations Office to Strengthen Overseas Rapid Reaction,” Wayback Machine, March 25, 2016, http://web.archive.org/web/20200119054234/http://english.chinamil.com.cn/news-channels/pla-daily-commentary/2016-03/25/content_6977517.htm.

66. Luce and Richter, “Handling Logistics,” 72.

Support Force has both a force-building role and an operational role—like the Strategic Support Force and the former Second Artillery Corps. Like United States Transportation Command, the Joint Logistic Support Force may have subcommands responsible for airlift and sealift; the force could task cargo planes, under a US-style “air mobility command,” to conduct troop transfers or to resupply China’s overseas garrisons, whereas replenishment ships would fall under a new sealift command.

The Joint Logistic Support Force would also assume responsibilities for overseas stockpiles and distribution. A larger, overseas PLA presence would strengthen the rationale for prepositioning supplies and equipment as well as provide the means to distribute them. One model would be the 12 distribution centers operated by the US Defense Logistics Agency in eight countries. For instance, Defense Logistics Agency Distribution Yokosuka has “general purpose, humidity controlled, secure, hazardous material, freeze, and chill warehousing capabilities.”⁶⁷ The size and scale of PLA distribution centers would be smaller, but they would need to have similar capabilities in principle. This approach would solve a current dilemma: Some products cannot be procured abroad by Chinese enterprises or third parties, and stockpiles managed by the individual services are more “wasteful” than those managed by a joint entity.⁶⁸ The PLA Navy has already begun to adopt this solution by stockpiling goods in Djibouti, but the nature of this arrangement conflicts with PLA logistical reforms that aim to centralize the management of supplies. Overseas logistics hubs are intended to support multiple services; thus, the navy would cede this responsibility to the Joint Logistic Support Force.

Larger Deployments

A related change would be the deployment of significantly larger numbers of logistics troops. In the first scenario, JLSF deployments would occur within niche areas. These roles would continue in the second, expanded scenario. But, in accordance with its broader responsibilities, the Joint Logistic Support Force would also deploy specialists to manage warehouses, perform engineering tasks, coordinate transportation, and provide overseas contracting support. The force might, for example, dispatch military representatives to the foreign offices of state-owned enterprises, where the representatives would track available resources, supervise training, and serve as operational liaisons. Some Chinese embassies could have a JLSF attaché who is responsible for liaising with host governments and identifying future logistical requirements.

Entire JLSF units could also deploy to support expeditionary operations. Such deployments would be most likely if the People’s Liberation Army were to conduct other joint operations in which the logistical capabilities of services were insufficient or duplicative. In this case, the Joint Logistic Support Force could leverage experience gained in transregional exercises and other training within China. Deployed joint logistics brigades could set up mobile food and water stations; maintain or improve highways; conduct rapid resupply to remote areas; set up modular field camps for brigade-sized units; conduct mobile refueling; carry out rapid deliveries via unmanned aerial

67. “DLA Distribution Yokosuka, Japan,” Defense Logistics Agency (website), n.d., <https://www.dla.mil/Distribution/Locations/Yokosuka.aspx>.

68. Dong Zhigao and Zhou Lei, “Understanding and thinking,” 85.

vehicles; monitor equipment status in climates where wear and tear is common (as they have done in Tibet); and provide commanders with an accurate picture of fuel, ordnance, and medical conditions.⁶⁹

A final JLSF role in this scenario would be supporting multinational, joint operations. China's recent overseas operations have been relatively self-contained, with limited need to work with foreign partners. (China's counterpiracy patrols have taken place outside the multinational coalitions led by the United States and the EU, for example.) But in the future, China might work more closely with other nations. For example, the People's Liberation Army might participate in combined anti-insurgency operations with Pakistan to protect Belt and Road Initiative (BRI) projects or border-defense operations with Tajikistan or Afghanistan. Closer to home, small, combined operations have already occurred: China and Tajikistan have carried out border patrols, and Chinese law enforcement services have conducted joint patrols of the Mekong River.⁷⁰ Multinational operations would create the need for a common logistical support function, similar to the role played by NATO's joint logistical support groups. These entities, which one US Army officer has called "sustainment brigade[s] on steroids," both directly support combat forces from multiple services and coordinate

	Regionally Focused People's Liberation Army	Global, Expeditionary People's Liberation Army
Transportation	Manage civilian maritime and air-support fleets	Manage civilian support fleets and military sealift, airlift, and replenishment
		Liaise with Chinese state-owned enterprises abroad
Other Sustainment Categories	Manage strategic delivery bases within China	Manage overseas distribution centers
	Deploy overseas medical and other support contingents on an ad hoc basis	Provide forward medical, engineering, and contracting services
		Provide large-scale logistical support for joint operations
		Coordinate with coalition partners

Table 8-1. Summary of the two scenarios

69. Sun Xingwei 孙兴维, Cheng Rong 程荣, and Wei Lianjun 魏联军, "构筑战略投送立体大动脉" [Build a three-dimensional artery for strategic delivery], *PLA Daily*, October 17, 2017, 6; Liu Yibo 刘一波 and Chen Yufu 陈玉富, "西宁联勤保障中心某部: 科学调度打造一体联动保障网络" [A Xining Joint Logistics Support Center unit: Scientifically building an integrated joint support network], China Military Online, February 12, 2020, http://www.81.cn/l-b/2020-02/12/content_9867608.htm; Lai Yuhong and Jing Bin, "PLA's First Field Modular Camping and Supporting System Puts into Use," China Military Online (website), July 28, 2020, http://www.81.cn/jwywpd/2020-07/28/content_9866584.htm; "重回演兵场, 全域保障为打赢" [Return to the exercise field, winning through multidomain support], China Military Online (website), August 30, 2019, http://www.81.cn/2019zt/2019-08/30/content_9606398.htm; Wang Junbo 王均波 and Zhu Sheng 朱胜, "郑州联勤保障中心组织无人机投送能力实飞验证" [Zhengzhou Joint Logistic Support Center unmanned aerial vehicle delivery test flight], China Military Online (website), December 24, 2019, http://www.81.cn/lqbz/2019-12/24/content_9702291.htm; *PLA Daily*, "联勤保障旅成为战场新质保障力量" [Joint Logistic Support Brigade has become a new quality support force on the battlefield], People's Network (website), February 20, 2020, <http://military.people.com.cn/n1/2020/0220/c1011-31596312.html>; and Lai Yuhong 赖瑜鸿, "无锡联勤保障中心某保障旅 一次驻训 三换场地" [A support brigade of the Wuxi Joint Logistic Support Center changes venues three times in a single training exercise], People's Network (website), July 25, 2018, <http://military.people.com.cn/n1/2018/0725/c1011-30168253.html>.

70. "Chinese, Tajik Frontier Units Conduct Joint Border Patrol," China Military Online (website), September 19, 2017, http://eng.chinamil.com.cn/view/2017-09/19/content_7762174.htm (page discontinued).

logistics between allies and with host nations and international organizations.⁷¹ Table 8-1 recapitulates the two scenarios previously discussed, dividing JLSF roles by transportation and other functions.

Challenges and Risks

In both scenarios, the Joint Logistic Support Force would perform logistical functions that suit changing operational realities. Whether it plays a regional role or a more global one, the new joint logistics force could provide cost savings at a time when the growth of China's defense budget has slowed. But these strategic benefits would depend on the People's Liberation Army's ability to overcome difficulties and manage risks. The second scenario, which envisions a significant realignment of operational responsibilities and expanded deployments, would be especially hard to attain within a decade, but not impossible, given major operational needs and decisive leadership. Problems could include pushback from the services or the theater commands, organizational mismatches, lack of overseas expertise and jointness among JLSF personnel, and risks to the command and information networks that would be needed to fashion a more cohesive joint logistics system abroad.

The first challenge is bureaucratic resistance. One disadvantage facing the Joint Logistic Support Force is its bureaucratic grade (theater deputy leader), which is a step lower than that of the services and the theaters, weakening the force's hand in negotiations. One could imagine the PLA Navy lobbying for a transfer of the transport ship *dadui* from the Joint Logistic Support Centers to the naval fleets. Likewise, the air force chief could make a similar argument about civilian aviation assets. Similarly, theater commanders could argue for control over civil transport units, which could reduce their availability for overseas operations. Empowering the Joint Logistic Support Force with responsibilities like those assigned to United States Transportation Command or the Defense Logistics Agency at the expense of the services would also invite resistance. Neither the PLA Navy nor the PLA Air Force should be expected to give up any remaining operational authority without a fight. (Indeed, following the 2016 reforms, all services managed to keep a hand in operations; for instance, the navy continues to oversee anti-piracy operations, despite this role having been nominally redirected to the Joint Staff Department.)⁷² Xi Jinping has demonstrated an ability to overcome such resistance, but his successor—if one arrives in the next decade—might lack a similar ability to rein in the bureaucracy.

The second challenge is misalignment between roles and organizations. The current JLSF structure is optimized for domestic and regional contingencies; the Joint Logistic Support Centers are configured to focus on the maintenance and resupply requirements of the theaters in which they are located. Joint Logistic Support Centers could play a limited, overseas role, such as directing the assets of civilian-support fleets operating far beyond China's coasts, but the expanded set of JLSF roles proposed in the second scenario would likely require stronger central management of operations, partner engagement, force development, etcetera. The menu of options is limited, and

71. Aaron Cornett, "Multinational Operations: JLSG Offers Effective Role with Allies, Partners," US Army (website), January 16, 2020, https://www.army.mil/article/231676/multinational_operations_jlsg_offers_effective_role_with_allies_partners; and NATO, *Allied Joint Doctrine for the Joint Logistic Support Group*, Allied Joint Publication 4.6(C)(1) (Brussels: NATO Standardization Office, 2018), 1–8.

72. Saunders, *Beyond Borders*, 6–7.

the ideal choice depends on the nature and degree of responsibility and the willingness to delegate.⁷³ One option would be a dedicated overseas operations office within JLSF headquarters. Other options would include handing this responsibility to a strategic delivery base or designating a Joint Logistic Support Center to lead in this area. (The prime candidate, given its location and maritime roles, would be the Guilin Joint Logistic Support Center.)

The third challenge is human capital deficiencies. Unlike the PLA Navy, the Joint Logistic Support Force is essentially a homebound organization; only a handful of the force's current personnel have any experience supporting expeditionary operations, and the force has no experience operating overseas distribution centers. One group of Chinese scholars argues the People's Liberation Army's future logistics personnel will need more exposure to international laws, policies, and operating environments, pointing to changes in training and educational curricula in the military.⁷⁴ Others recommend a training course for logisticians who are preparing for overseas assignments (versus a general track for those anticipating domestic assignments) as well as changes to the personnel system, including rotations between domestic and foreign bases and stronger incentives for overseas work.⁷⁵

Given the focus of Chinese power projection, JLSF force development will have to produce a greater understanding of naval and air force requirements. Drawn from the military regions and the General Logistics Department, most JLSF personnel—in particular, most senior leaders—are ground-force officers. (As of March 2020, the JLSF commander was an air force officer, but most of his subordinates, including all Joint Logistic Support Center directors, were army officers.) Supervising the civilian-support fleets and supporting joint task forces—not to mention playing a role in managing military airlift and sealift—would require stronger expertise in these domains. This expertise could be acquired in two ways: first, absorbing talent directly from the services, which would come at their expense and, thus, invite resistance (either by converting entire units or through rotational assignments); and, second, building more diverse expertise from the bottom up, which may require onerous changes to recruitment, training, and education. But a precedent exists: The Strategic Support Force reportedly absorbed some cyber units previously affiliated with the services.⁷⁶ Failure to increase jointness would provide the services a handy argument for overseas logistics remaining in their purview.

The fourth challenge is mitigating operational risks. Despite its weaknesses, a piecemeal approach to overseas logistics has at least one operational advantage: reduced exposure to systemic failure. A disruption in supplies in a single port, for instance, would not have broader consequences. A more integrated system, in contrast, would require the Joint Logistic Support Force to establish reliable command, control, and communications networks as well as logistics information systems, as the force has done at home.⁷⁷ (Notably, accomplishing this feat would also be a challenge if the PLA Navy were to retain the lead role.) But these links would operate beyond the safety of the "Great

73. Saunders, *Beyond Borders*.

74. Wang Tianze, Qi Wenzhe, and Hai Jun, "Transportation and support," 35.

75. Dong Zhigao and Zhou Lei, "Understanding and thinking," 85.

76. John Chen, Joe McReynolds, and Kieran Green, "The PLA Strategic Support Force: A 'Joint' Force in Information Operations," in *PLA beyond Borders*, 149–78.

77. Erin Richter, LeeAnn Ragland, and Katherine Atha, "General Logistics Department Organizational Reforms: 2000–2012," in *The PLA as Organization v2.0*, ed. Kevin Pollpeter and Kenneth W. Allen (Vienna, VA: Defense Group Inc., 2015), 216.

Firewall,” thus presenting attractive targets to adversaries collecting intelligence or developing the ability to complicate Chinese operations in a conflict. The links might also be harder to repair. (These risks should be well known to the People’s Liberation Army, which has similarly targeted US global logistics networks.)⁷⁸ A priority for the Joint Logistic Support Force would therefore be developing the technical expertise to keep the system running.

Conclusion

The People’s Liberation Army has improved its ability to conduct complex, joint operations at home, but its joint capabilities abroad are less well developed.⁷⁹ To move from single-service to joint operations far beyond China, the People’s Liberation Army will require further changes to its logistics system and other functions, such as command, control, communications, computers, intelligence, surveillance, and reconnaissance as well as firepower. These changes would also help the People’s Liberation Army shift its focus from nontraditional security to the projection of combat power at longer ranges from the mainland. Whether and how the logistics system will evolve to mirror the joint structure instituted within China more closely remains an open question.

Regardless of whether the Joint Logistic Support Force takes a regional form or a global one, as in the first and second scenarios discussed previously, these new developments will have broad consequences for both the People’s Liberation Army and the United States, which until now has been the world leader in expeditionary operations. In the first scenario, the People’s Liberation Army would continue to focus its expeditionary logistics on nontraditional security operations; in the second, the organization could conduct some joint combat missions, though probably not at the scale or complexity at which the US military conducts them. From a US perspective, the first scenario would imply less mature capabilities for projecting combat power and thus pose fewer threats to US interests. The first scenario might even further US interests if the operations were focused on regional public goods. The second scenario would pose more problems for the United States if the People’s Liberation Army were to employ its growing combat capabilities to establish itself as an influential security partner for third-party countries, thus undercutting US advantages in security assistance. The People’s Liberation Army might even use these capabilities to intimidate or to strike US allies or partners—or even US forces—directly.

Several indicators may help to predict future developments in China’s overseas logistical capabilities. The first indicator is evolving security assessments: If the People’s Liberation Army sees reduced threats at home or in the region or growing challenges abroad, the organization might focus more of the Joint Logistic Support Force’s attention overseas. Second is the force’s role in strategic delivery: Supervising civilian-support fleets or managing a support base in China would suggest a narrower role than directly leading assets owned by the services. Internal PLA discussions could therefore indicate future changes, especially if the organization were to consider

78. Roger Cliff et al., *Entering the Dragon’s Lair* (Santa Monica, CA: RAND Corporation, 2007), 60–62; and Yaqiu Wang, “In China, the ‘Great Firewall’ Is Changing a Generation,” *Politico* (website), September 1, 2020, <https://www.politico.com/news/magazine/2020/09/01/china-great-firewall-generation-405385>.

79. Cozad, “Joint, Combat Ready PLA?”; and Joel Wuthnow, “A Brave New World for Chinese Joint Operations,” *Journal of Strategic Studies* 40, no. 1-2 (2017): 169–95.

a combatant command model further. Third, changes to JLSF training or to educational or personnel policies could lay the groundwork for a greater capacity to operate overseas. The fourth indicator would be research or other evidence the Joint Logistic Support Force is considering an information platform to provide a common operational and management picture for global logistics. Such indicators might include PLA examinations of similar US global information systems, like the Army Enterprise Systems Integration Program.⁸⁰ Scholars should pay attention to these indicators and other signs China's joint logistics forces are preparing to support a global, expeditionary People's Liberation Army.

80. National Research Council, *Force Multiplying Technologies for Logistics Support to Military Operations* (Washington, DC: National Academies Press, 2014), 109–25.

Select Bibliography

- Chung, Chieh., and Andrew N. D. Yang. "Crossing the Strait: Recent Trends in PLA 'Strategic Delivery' Capabilities," in *The PLA beyond Borders: Chinese Military Operations in Regional and Global Context*. ed. Joel Wuthnow et al. Washington, DC: National Defense University Press, 2021.
- Dutton, Peter A., Isaac B. Kardon, and Conor M. Kennedy. *Djibouti: China's First Overseas Strategic Strongpoint*. China Maritime Report no. 6. Newport, RI: China Maritime Studies Institute, 2020.
- Fravel, M. Taylor. *Active Defense: China's Military Strategy since 1949*. Princeton, NJ: Princeton University Press, 2019.
- Heath, Timothy R. *China's Pursuit of Overseas Security*. Santa Monica, CA: RAND Corporation, 2018.
- Joint Chiefs of Staff. *Joint Logistics*. Joint Publication 4-0. Washington, DC: Joint Chiefs of Staff, February 4, 2019.
- Kardon, Isaac B. "China's Overseas Base, Places, and Far Seas Logistics," in *The PLA beyond Borders: Chinese Military Operations in Regional and Global Context*. ed. Joel Wuthnow et al. Washington, DC: National Defense University Press, 2021.
- Kardon, Isaac B., Conor M. Kennedy, and Peter A. Dutton. *Gwadar: China's Potential Strategic Strongpoint in Pakistan*, China Maritime Report no. 7. Newport, RI: China Maritime Studies Institute, 2020.
- Kennedy, Conor M., *Civil Transport in PLA Power Projection*. Newport, RI: China Maritime Studies Institute, 2019.
- Luce, LeighAnn., and Erin Richter. "Handling Logistics in a Reformed PLA: The Long March toward Joint Logistics," in *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*. ed. Phillip C. Saunders et al. Washington, DC: National Defense University Press, 2019.
- Peltier, Chad. *China's Logistics Capabilities for Expeditionary Operations*. Washington, DC: US-China Economic and Security Review Commission, 2020.
- Puska, Susan M. "Taming the Hydra: Trends in China's Military Logistics since 2000," in *The PLA at Home and Abroad: Assessing the Operational Capabilities of China's Military*. ed. Roy Kamphausen, David Lai, and Andrew Scobell. Carlisle, PA: Strategic Studies Institute, US Army War College Press, 2010.
- Saunders, Phillip C. *Beyond Borders: PLA Command and Control of Overseas Operations*. Strategic Forum no. 306. Washington, DC: Institute for National Strategic Studies, National Defense University Press, 2020.
- State Council Information Office of the People's Republic of China. "China's National Defense in the New Era." white paper, State Council Information Office of the People's Republic of China, Beijing, July 2019.
- Wuthnow, Joel. "A New Era for Chinese Military Logistics." *Asian Security* 17, no. 3 (2021).
- Wuthnow, Joel., and Phillip C. Saunders. *Chinese Military Reforms in the Age of Xi Jinping: Drivers, Challenges, and Implications*. China Strategic Perspectives no. 10. Washington, DC: Institute for National Strategic Studies, National Defense University Press, 2017.

